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**DEC 23 2010**

**DIV. OF OIL, GAS & MINING**

Mr. Jeffry Smith  
US Bureau of Land Management  
82 East Dogwood  
Moab Utah 84532

December 14, 2010

Mr. Tom Munsen  
Utah Division of Oil, Gas, & Mining  
1594 West North Temple Suite 1210  
Salt Lake City, UT 84114-5801

Re: Response to Comments. Mine Plan Modification Dump C Expansion/Dump B Reduction. Lisbon Valley Mining Company LLC. 920 South County Road 313, La Sal, Utah, 84530.

Dear Jeffry:

The Lisbon Valley Mining Co LLC (LVMC) respectfully submits this response to the BLM's comments dated December 10, 2010. Our response is formatted as bullets in accordance with each comment received.

**Cover Letter**

- The document dated November 2, 2010 can supersede the one dated October 29, 2010.
- The pre-strip phase of the southern Centennial pit expansion is costly because the strip ratio is 4:1 waste to ore. This is almost as high as the highest life-of-mine strip, which is about 4 ½:1 in the GTO pit. Higher strip ratios have a linear relationship with higher mining costs. The haul distance and calculated cycle time to the proposed south Dump C expansion (the proposed expansion) is 25% shorter than the haul to Dump B. Reduced cycle time is significant when considering the owning and operating cost of a mine fleet. This cost of a CAT 773 haul truck is approximately 175/hr when it is new and repairs are minimal. The second consideration is the resulting 25% increase in production.



A comparison of one CAT 773 truck hauling waste from the southern Centennial pit to the expansion area versus Dump B is provided as an example.

<b>Dump C vs. Dump B Waste Haul Comparison CAT 773 - 24hr Shift</b>			
	SE Dump C	Dump B	
Loads/Shift	140	105	
Production	8400 ton	6300 ton	
Cost	4200	4200	
Cost/Ton	\$0.50	\$0.67	

- The Centennial Pit southern expansion from 116 acres to 173 acres was approved by the BLM in 2007.<sup>1</sup> The planned expansion is based on copper grade in the southern Centennial pit that became economical in 2006 when copper prices increased from 1.25 to 3.00/lb.
- Ore and waste is mined by blasting blocks of Dakota sandstone with prill and diesel loaded in 20' deep boreholes spaced 14-20' laterally. The blasted material (run-of-mine) is loaded into Terex 740 40-ton trucks and CAT 773 60-ton trucks using a Kawasaki (CAT 990-equivalent) loader. The trucks haul ore to the waste dumps and end-dump the material in 50' lifts.
- Operations are presently ceased in the GTO pit, but will resume as the Centennial pit is mined out.

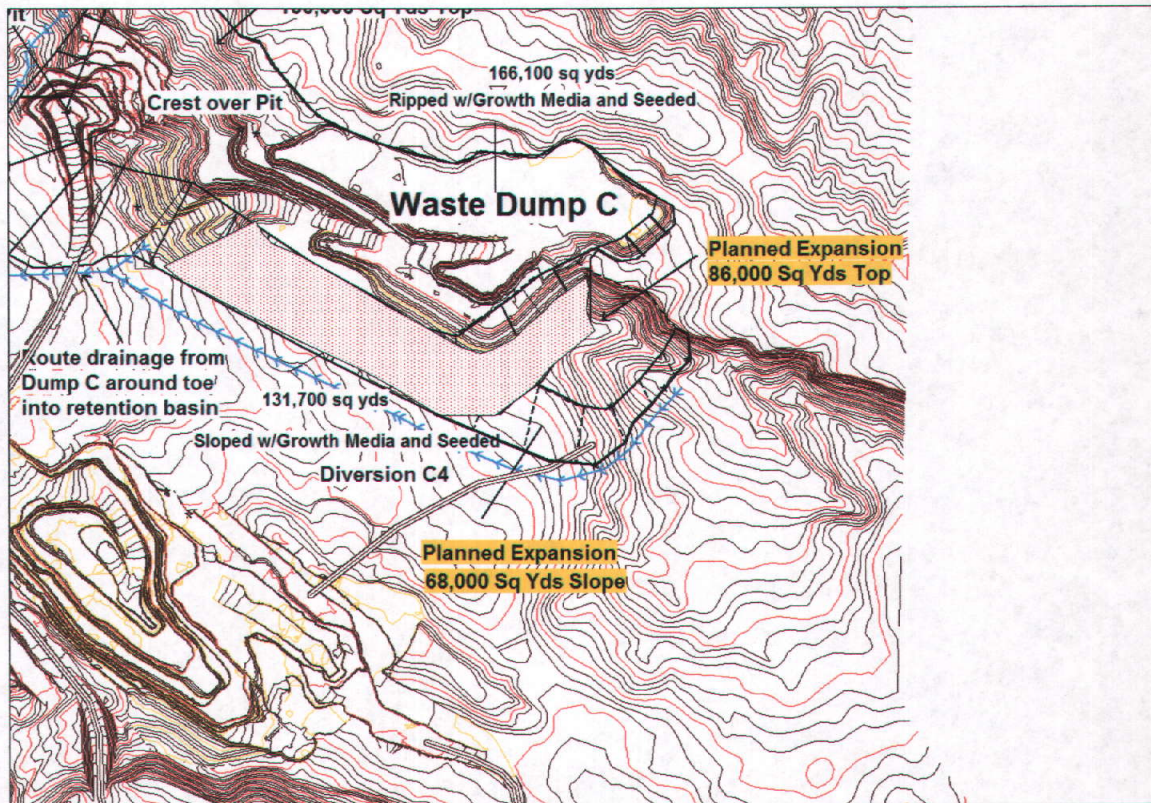
## **Section 1 – Technical Description**

- The proposed haul road to Dump C will be 80' wide. The road will be constructed with ROM waste. This material will have a 24" minus gradation, and is well-suited for haul truck road base. The same material has been approved by San Juan County as road base for planned realignment in 2011. The rock will come from the layback area (Wingate SS) or east Centennial Pit (Lower Dakota SS) area depending on the mine schedule at the time. The road will reach a maximum grade of 10% at the edge of the dump. All rock used for road construction will have acid neutralization potential (ANP).

<sup>1</sup> US Bureau of Land Management 2007. Documentation of Land Use Conformance and Determination of NEPA Adequacy (DNA) UTU-060-2007-067DNA



- The haul distance from the center of the southern Centennial pit to the center of the proposed expansion is approximately 2150'. 750' of this distance will reach a 10% grade. The same haul to center of Dump B is 5150'. 1800' of this haul exceeds a 10% grade.
- Erosion control of the haul road is provided by the rock gradation (minus 24"). Similar rock is used as rip rap in diversion channels. Drainage will be routed around the toe of the slope to merge with Diversion C4. A rock-armored swale will facilitate drainage across the haul road.



#### Diversion C4

- LVMC has planned to waste 4.6M tons in the proposed expansion. At a 4:1 strip, and daily mine production goal of 35,000 tons/day. It is estimated that this tonnage will be emplaced in 6 months.
- The dump will tie into the south face of the existing dump and east rim of Lisbon Valley. The dump face will look similar to the existing dump with breaks in slope every 100 feet and roughened surface.
- The topsoil on the south face of Dump C will not be salvaged. Topsoil and pinyon/juniper in the proposed expansion will be grubbed and stockpiled on the south toe of the dump.



- The surface water diversion will be expanded to the south to route drainage from the east valley rim around the toe of the expanded slope (see Diversion C4).
- The amount of waste proposed for the expansion is the same amount of waste that will not be wasted in Dump B. Dump B is presently in progress. LVMC has hauled no waste, nor conducted any disturbance activity at the proposed expansion area.
- In general, the same reclamation practices will be used to reclaim the expansion area. This includes construction of a stable slope and revegetation. However, LVMC plans to include more breaks in slope and roughen the surface more than the existing dump surface. This has been a work in progress in accordance with guidance from DOGM.
- Correct, there is no additional ground disturbance associated with the proposed expansion. Ground disturbance is being relocated only.
- Waste rock is tested in accordance with the Meteoric Water Mobility Procedure. Waste rock with acid generation potential (AGP) is encapsulated inside waste with acid neutralization potential (ANP). AGP waste is black and contains considerable coal and clay. This waste is readily discernable by the loader operators and is deposited near the center of dumps. LVMC surveys the location of AGP waste as it is deposited. As-built surveys of the dumps, pad, and pits are completed annually by a contractor (Maptek). LVMC will include the dump and pit surveys as part of the 2010 Waste Rock Monitoring Report currently in progress. This report will be finished after 4<sup>th</sup> Quarter sample analytical results are received from the laboratory. This is anticipated first week in February 2011. LVMC respectfully requests that this information be provided as a follow-up to the approval to proceed.



## Approval Request

The LVMC appreciates the agencies' ongoing guidance and support as the LVMC continues the planned mine expansion. We look forward to your review, approval, and written request to proceed. Please call Lantz Indergard at (435) 686 9950 #107 or email [Lindergard@lisbonmine.com](mailto:Lindergard@lisbonmine.com) if additional information is needed.

Sincerely,



Lantz Indergard PG  
Environmental Manager  
Lisbon Valley Mining Co LLC